

WHAT IS CLAIMED IS:

1. A contamination-free apparatus for drying coated photoreceptors, the contamination free apparatus comprising:

(a) an oven assembly including first and second side walls defining a heating chamber as well as an entrance into, and an exit from, said heating chamber;

(b) a guiding track for guiding a photoreceptor carrier into and out of said heating chamber;

(c) first and second magnetic drive loops mounted for movement externally along said first and second side walls respectively, each said first and second magnetic drive loops including first magnetic elements inducing magnetic forces through said first and second side walls into said heating chamber; and

(d) carrier means for holding a plural number of coated photoreceptors for movement through said heating chamber, said carrier means including (i) track following means for moving over said guiding track through said heating chamber, (ii) first and second end walls for facing said first and second side walls of said heating chamber, and (iii) second magnetic elements mounted on said first and second end walls for coupling with said first magnetic elements and enabling said first and second magnetic drive loops to magnetically move said carrier means through said heating chamber.

2. The contamination-free apparatus of **claim 1**, including an air bearing assembly for holding said track following means out of contact with said guiding track as said carrier means is magnetically moved through said heating chamber.

3. The contamination-free apparatus of **claim 1**, wherein said carrier means is made of a non-magnetic material.

4. The contamination-free apparatus of **claim 1**, including first and second synchronized drive motors for driving said first and second magnetic drive loops.

5. The contamination-free apparatus of **claim 2**, wherein said air bearing assembly includes sources of pressurized air, and a plural number of air bearing plates mounted on said carrier means for receiving and reacting to pressurized air from said sources of pressurized air.

6. The contamination-free apparatus of **claim 3**, wherein said non-magnetic material comprises aluminum.

7. The contamination-free apparatus of **claim 4**, wherein said first and second synchronized drive motors each comprises an indexing drive motor.

8. The contamination-free apparatus of **claim 5**, wherein said plural number of air bearing plates includes first and second air bearing plates mounted respectively on said first and second end walls for centering said carrier means within said heating chamber.

9. The contamination-free apparatus of **claim 5**, wherein said plural number of air bearing plates includes a series of air bearing plates mounted on a bottom wall of said carrier means for holding said track following means out of contact with said guiding track.

10. Drying apparatus for drying coated photoreceptors, the apparatus comprising:

(a) a pallet for holding a plurality of photoreceptors, said pallet having a first end including a first magnetic member, and a second end including a second magnetic member;

(b) a drying oven assembly having (i) a base, (ii) a heat source, (iii) first and second side walls defining a heating chamber and a passage through said heating chamber, and (iv) a first air bearing system for keeping said pallet out of contact with said base during movement of said pallet through said heating chamber; and

(c) first and second movable magnetic drive belt assemblies mounted externally and respectively of said first and second side walls of said drying oven assembly, each of said first and second movable magnetic drive belt assemblies including magnetic elements for coupling respectively with said first magnetic member and said with second magnetic member for moving said pallet, thereby moving said pallet and said plurality of photoreceptors therein in a non-contacting, contamination-free manner through said heating chamber.

11. The drying apparatus of **claim 10**, wherein said air bearing system includes sources of pressurized air, and a plural number of air bearing plates mounted on said pallet for receiving and reacting to pressurized air from said sources of pressurized air.

12. The drying apparatus of **claim 11**, wherein said plural number of air bearing plates includes first and second air bearing plates mounted respectively on said first and second end walls for centering said carrier means within said heating chamber.

13. The drying apparatus of **claim 11**, wherein said plural number of air bearing plates includes a series of air bearing plates mounted on a bottom wall of said carrier means for holding said track following means out of contact with said guiding track.

14. A contamination-free apparatus for drying coated photoreceptors, the contamination free apparatus comprising:

(a) an oven assembly including first and second side walls defining a heating chamber as well as an entrance into, and an exit from, said heating chamber;

(b) a guiding track for guiding a photoreceptor carrier into and out of said heating chamber;

(c) first and second magnetic drive loops mounted for movement externally along said first and second side walls respectively, each said first and second magnetic drive loops including first magnetic elements inducing magnetic forces through said first and second side walls into said heating chamber;

(d) carrier means for holding a plural number of coated photoreceptors for movement through said heating chamber, said carrier means including (i) track following means for moving over said guiding track through said heating chamber, (ii) first and second end walls for facing said first and second side walls of said heating chamber, and (iii) second magnetic elements mounted on said first and second end walls for coupling with said first magnetic elements and enabling said first and second magnetic drive loops to magnetically move said carrier means through said heating chamber; and

(e) an air bearing assembly for holding said track following means out of contact with said guiding track as said carrier means is

magnetically moved through said heating chamber, thereby moving said pallet and said plurality of photoreceptors therein in a non-contacting, contamination-free manner through said heating chamber.